OPTIONAL FORM NO. 10 SECRET

UNITED STATES GOVERNMENT

Memorandum

IAD - 99/66

TO : Director, NPIC

DATE: 22 September 1966

FROM : Chief, Imagery Analysis Division, CIA

SUBJECT: Comments on "Investigations on the Feasibility of Determining Yield of Rice, Wheat and Sugar Cane by means of High-Altitude Photography".

The attached comments on the subject report has been prepared for your information by [redacted] of IAD.

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[redacted]

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SECRET

Comments on
"Investigations on the feasibility of determining yield of rice, wheat and sugar cane by means of high-altitude photography".
"Appendices"
(Final Technical Report on Project [redacted] STATINTL
by
STATINTL [redacted] January 6, 1966

The volume for which analysis and comment have been requested contains a series of appendices to a report that is not at hand. They are designed to acquaint the reader with evaluations of various types of film used in photographing several types of crops. Some vertical photographs are reproduced on a scale of 1:300,000, but many of the illustrations are in a scale range from 1:5,000 to 1"20,000. There are also low oblique photos. In the text and discussions of the photographs the emphasis is placed on detection of a variety of factors that will influence crop yield, although actual estimates of yield do not accompany any of the sets of photography. Repeated illustrations of the value of infrared photography serve to convince the reader that it is superior for certain purposes, but without the main body of the report to which these appendices must have been attached the reader does not have the necessary orientation for proceeding independently in the evaluation of photography from other sources.

Differences in visibility at various elevations and scales, deficiencies of various types of film in the portrayal of crop status, weed and other infestation detection, and fertilizer, soil, and water expressions are discussed alternately, often within the same short paragraph. There is no methodical procedure of discussion by means of which the reader can find a particular point of information, nor is there a means by which the reader can assure himself that he has found all discussion on any special topic. The photographs are used to point out details of crop expression in order to show the differences in results achieved with use of several kinds of film, but at least within the body of these appendices there is no complete discussion of all tone and color significance on a single series of details.

This reviewer, with a fair knowledge of soil science and hydrology, crop growth, and infestations, is left with the feeling that: Yes, these details have been seen in spot references at earlier times, but this compilation of appendices, without the main body of the report, does not serve as a satisfactory reference work. Perhaps it was meant to be a critique on use of the several types of film for selected purposes. In this case it may be of more use to the planning and programming staff than it is to the photo interpreter concerned with the need for dependable keys to total crop evaluation, for it does not serve well as a key. It is one thing to indicate deficiencies in experimental plots subject to ground observation. Quite another approach is necessary to the photo interpreter who works only in his laboratory without ever having seen the subject crop on the ground.

[redacted] STATINTL

23 September 1966